

SUPER WHITE CHOLESTERIC DISPLAYS EMPLOYING BACKSIDE CIRCULAR POLARIZER

ABSTRACT:

The present invention relates to cholesteric displays, more specifically, to reflective cholesteric displays employing a backside circular polarizer. In the paper white mode, the bright white state is achieved in display's focal conic texture area; and the dark color state is obtained in display's planar texture area. In the full color mode, meanwhile, the full color state is created in the focal conic texture area; and the dark color state is achieved in the cholesteric focal conic texture area. Either the absorptive circular polarizer or the reflective broadband circular polarizer can be used as the backside polarizer. A bright neutral white color with 50% front light reflection has been accomplished in the novel display.